

In the Claims:

1. (currently amended) An apparatus for providing universal web access functionality comprising:

a first electronic device having a plurality of configurable Input/Output ports;

a network connection to said first electronic device on a first one of said plurality of configurable Input/Output ports; and

at least one second electronic device connected to said first electronic device on a second one of said plurality of configurable Input/Output ports, wherein said first electronic device serves web pages associated with said at least one second electronic device, wherein configuration parameters for said second one of said plurality of configurable Input/Output ports are set using a browser interface to said first electronic device.

2. (currently amended) A method for providing universal web access functionality comprising:

providing a plurality of configurable Input/Output ports on a first electronic device;

connecting said first electronic device to a network via a first one of said plurality of configurable Input/Output ports; and

connecting at least one second electronic device to said first electronic device on a second one of said plurality of configurable Input/Output ports, wherein said first electronic device serves web pages associated with said at least one second electronic device; and

setting configuration parameters for said second one of said plurality of configurable Input/Output ports using a browser interface to said first electronic device.

3. (currently amended) An apparatus for providing universal web access functionality comprising:

a plurality of configurable Input/Output ports for connection to at least one electronic device;

a server engine providing access to said at least one electronic device via said plurality of configurable Input/Output ports; and

an interface device providing remote connectivity to said server engine via a network, wherein configuration parameters for said plurality of configurable Input/Output ports are set using said interface device.

4. (previously presented) The apparatus of claim 3, wherein said plurality of configurable Input/Output ports comprises analog Input/Output ports.

5. (previously presented) The apparatus of claim 3, wherein said plurality of configurable Input/Output ports comprises digital Input/Output ports.

6. (previously presented) The apparatus of claim 3, wherein said plurality of configurable Input/Output ports comprises an RS-232 port.

7. (previously presented) The apparatus of claim 3, wherein said plurality of configurable Input/Output ports comprises an RS-422 port.

8. (previously presented) The apparatus of claim 3, wherein said plurality of configurable Input/Output ports comprises an RS-485 port.

9. (previously presented) The apparatus of claim 3, wherein said plurality of configurable Input/Output ports comprises an infrared (IR) port.

10. (previously presented) The apparatus of claim 3, wherein said plurality of configurable Input/Output ports comprises general purpose Input/Output ports.

11. (previously presented) The apparatus of claim 3, wherein said interface device comprises a configurable graphical user interface.

12. (previously presented) The apparatus of claim 3, wherein said interface device comprises a network interface card.

13. (previously presented) The apparatus of claim 12, wherein said network interface card comprises an RJ-45 connector.

14. (previously presented) The apparatus of claim 12, wherein said network interface card comprises a wireless connector.

15. (previously presented) The apparatus of claim 3, wherein said at least one electronic device is not web enabled.

16. (previously presented) The apparatus of claim 3, wherein said server engine comprises:
a flattened stack handler for processing an ethernet packet;
a server-side include function;
a URL encoder/decoder function; and
an electronic mail notification handler.

17. (currently amended) The apparatus of claim 16, wherein said processing said ethernet packet comprises:

receiving said ethernet packet ~~comprising~~ comprising Ethernet header, IP header, TCP/UDP header, and payload; and

processing said payload only if said Ethernet header, said IP header and said UDP/TCP header are associated with an active service at an application layer.

18. (currently amended) A method for providing universal web access functionality comprising:

providing a plurality of configurable Input/Output ports for connection to at least one electronic device;

providing a server engine for access to said at least one electronic device via said plurality of configurable Input/Output ports; and

providing an interface device for remote connectivity to said server engine via a network; and
setting configuration parameters for said plurality of configurable Input/Output ports using said interface device.

19. (previously presented) The method of claim 18, wherein said plurality of configurable Input/Output ports comprises analog Input/Output ports.

20. (previously presented) The method of claim 18, wherein said plurality of configurable Input/Output ports comprises digital Input/Output ports.

21. (previously presented) The method of claim 18, wherein said plurality of configurable Input/Output ports comprises an RS-232 port.

22. (previously presented) The method of claim 18, wherein said plurality of configurable Input/Output ports comprises an RS-422 port.

23. (previously presented) The method of claim 18, wherein said plurality of configurable Input/Output ports comprises an RS-485 port.

24. (previously presented) The method of claim 18, wherein said plurality of configurable Input/Output ports comprises an infrared (IR) port.
25. (previously presented) The method of claim 18, wherein said plurality of configurable Input/Output ports comprises general purpose Input/Output ports.
26. (previously presented) The method of claim 18, wherein said interface device comprises a configurable graphical user interface.
27. (previously presented) The method of claim 18, wherein said interface device comprises a network interface card.
28. (previously presented) The method of claim 27, wherein said network interface card comprises an RJ-45 connector.
29. (previously presented) The method of claim 27, wherein said network interface card comprises a wireless connection.
30. (previously presented) The method of claim 18, wherein said at least one electronic device is not web enabled.
31. (previously presented) The method of claim 18, wherein said server engine comprises:
 - a flattened stack handler for processing an ethernet packet;
 - a server-side include function;
 - a URL encoder/decoder function; and
 - an electronic mail notification handler.

32. (currently amended) The method of claim 31, wherein said processing said ethernet packet comprises:

receiving said ethernet packet ~~comprising~~ comprising Ethernet header, IP header, TCP/UDP header, and payload; and

processing said payload only if said Ethernet header, said IP header and said UDP/TCP header are associated with an active service at an application layer.

33. (new) The method of claim 1, wherein said apparatus further comprises:

registers set by said configuration parameters; and

devices selected from a group consisting of switches and gates, said devices for enabling circuitry in accordance with the configuration parameters, said devices driven by said registers.

34. (new) The method of claim 1, wherein said apparatus further comprises:

a tri-state buffer, said tri-state buffer being enabled to generate output high at said second one of said plurality of configurable Input/Output ports; and

an open collector output driver, said open collector output driver being set to low impedance mode to generate an output low at said second one of said plurality of configurable Input/Output ports.

35. (new) The method of claim 1, wherein said apparatus further comprises:

an open collector output driver, said open collector output driver set to a high impedance state to enable an input mode at said second one of said plurality of configurable Input/Output ports; and

a tri-state buffer, said tri-state buffer set to an off mode to enable the input mode at said second one of said plurality of configurable Input/Output ports.

36. (new) The method of claim 2, further comprising:

setting registers in response to said configuration parameters; and

driving from said registers devices selected from a group consisting of switches and gates, said devices for enabling circuitry in accordance with the configuration parameters.

37. (new) The method of claim 2, further comprising:

removing a tri-state buffer out of tri-state mode and driving a pull-up resistor high to generate output high at said second one of said plurality of configurable Input/Output ports; and

setting an open collector output driver to low impedance mode to generate an output low at said second one of said plurality of configurable Input/Output ports.

38. (new) The method of claim 2, further comprising:

setting an open collector output driver to a high impedance state to enable an input mode at said second one of said plurality of configurable Input/Output ports; and

setting a tri-state buffer to an off mode to enable an input mode at said second one of said plurality of configurable Input/Output ports.

39. (new) The method of claim 3, wherein said apparatus further comprises:

registers set by said configuration parameters; and

devices selected from a group consisting of switches and gates, said devices for enabling circuitry in accordance with the configuration parameters, said devices driven by said registers.

40. (new) The method of claim 3, wherein said apparatus further comprises:

a tri-state buffer, said tri-state buffer being enabled to generate output high on at least one of said plurality of configurable Input/Output ports; and

an open collector output driver, said open collector output driver being set to low impedance mode to generate an output low on at least one of said plurality of configurable Input/Output ports.

41. (new) The method of claim 3, wherein said apparatus further comprises:

an open collector output driver, said open collector output driver set to a high impedance state to enable an input mode on at least one of said plurality of configurable Input/Output ports; and

a tri-state buffer, said tri-state buffer set to an off mode to enable the input mode on at least one of said plurality of configurable Input/Output ports.

42. (new) The method of claim 18, said method further comprising:

setting registers in response to said configuration parameters; and

driving from said registers devices selected from a group consisting of switches and gates, said devices for enabling circuitry in accordance with the configuration parameters.

43. (new) The method of claim 18, said method further comprising:

removing a tri-state buffer out of tri-state mode and driving a pull-up resistor high to generate output high on at least one of said plurality of configurable Input/Output ports; and

setting an open collector output driver to low impedance mode to generate an output low on at least one of said plurality of configurable Input/Output ports.

44. (new) The method of claim 18, said method further comprising:

setting an open collector output driver to a high impedance state to enable an input mode on at least one of said plurality of configurable Input/Output ports; and

setting a tri-state buffer to an off mode to enable an input mode on at least one of said plurality of configurable Input/Output ports.